

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the present application.

### **Listing of Claims:**

#### **Claim 1 (canceled)**

#### **Claim 2 (currently amended):** A ceramic composite comprising:

a phase having as its principal component, at a content of 40 to 98 wt.%, a pure carbon allotrope of 30 nm or less average crystal-grain size, said carbon being one selected from graphite, amorphous carbon, carbon black and fullerenes; and  
a ceramic phase constituted by a ceramic that excludes pure carbon allotropes.

#### **Claims 3 through 9 (canceled)**

**Claim 10 (currently amended):** A method of manufacturing ~~[[a]]~~ the ceramic composite ~~[[as]]~~ set forth in claim 2, ~~composed of a phase having as its principal component a pure carbon allotrope of 30 nm or less average crystal-grain size, and a ceramic phase that excludes pure carbon allotropes~~, characterized in that a powder blend of a ceramic powder that excludes pure carbon allotropes and in which the average crystal-grain size is 30 nm or less and a carbon powder is molded, and the obtained molded form is sintered within a non-oxidizing atmosphere at a sintering temperature of 800 to 1500°C and a sintering pressure of 200 MPa or more.

**Claim 11 (currently amended):** A ceramic-composite manufacturing method ~~of manufacturing a ceramic composite~~ as set forth in claim 10, ~~composed of a phase having as its principal component a pure carbon allotrope of 30 nm or less average~~

~~crystal grain size, and a ceramic phase that excludes pure carbon allotropes,~~  
characterized in that the ceramic powder is one or more selected from the group  
made up of nitrides and carbides, as well as oxides, composite nitrides, composite  
carbides, composite oxides, carbonitrides, oxynitrides, oxycarbonitrides, and  
oxycarbides of at least one metal selected from Al, Si, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo  
and W.

**Claim 12 (currently amended):** A ceramic-composite manufacturing method  
~~of manufacturing a ceramic composite as set forth in claim 11, composed of a phase~~  
~~having carbon of 30 nm or less average crystal grain size as the principal~~  
~~component, and a ceramic phase,~~ characterized in that the powder blend further  
includes at least one metal selected from Al, Si, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 13 (canceled)**

**Claim 14 (previously presented):** A ceramic composite as set forth in claim  
2, characterized in that the open porosity in the composite superficially after being  
polished is 1% or less.

**Claim 15 (previously presented):** A ceramic composite as set forth in claim  
2, characterized in that the Vickers hardness of the composite in sintered form is 10  
GPa or greater.

**Claim 16 (previously presented):** A ceramic composite as set forth in claim  
2, characterized in that the ceramic phase is constituted from at least one selected  
from the group made up of nitrides, carbides, oxides, composite nitrides, composite  
carbides, composite oxides, carbonitrides, oxynitrides, oxycarbonitrides, and  
oxycarbides of Al, Si, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo and W.

**Claims 17 and 18 (canceled)**

**Claim 19 (currently amended):** A ceramic composite as set forth in claim [[1]]  
2, characterized in that the ceramic phase is constituted from at least one selected  
from the group made up of nitrides, carbides, oxides, composite nitrides, composite  
carbides, composite oxides, carbonitrides, oxynitrides, oxycarbonitrides, and  
oxycarbides of Si, Zr, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 20 (currently amended):** A ceramic composite as set forth in claim [[1]]  
2, characterized in that the ceramic phase is constituted from at least one selected  
from the group made up of nitrides, carbides, oxides, composite nitrides, composite  
carbides, composite oxides, carbonitrides, oxynitrides, oxycarbonitrides, and  
oxycarbides of Si, Ti, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 21 (canceled)**

**Claim 22 (currently amended):** A ceramic composite as set forth in claim  
[[18]] 2, characterized in that the ceramic phase is constituted from at least one  
selected from the group made up of nitrides, carbides, oxides, composite nitrides,  
composite carbides, composite oxides, carbonitrides, oxynitrides, oxycarbonitrides,  
and oxycarbides of Si, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 23 (currently amended):** A ceramic composite as set forth in claim [[1]]  
2, characterized in that the ceramic phase is constituted from at least one selected  
from the group made up of nitrides, carbides, composite nitrides, composite carbides,  
and carbonitrides of Al, Si, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 24 (currently amended):** A ceramic composite as set forth in claim [[1]]  
2, characterized in that the ceramic phase is constituted from at least one selected

from the group made up of nitrides, carbides, composite nitrides, composite carbides, and carbonitrides of Si, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 25 (currently amended):** A ceramic composite as set forth in claim [[1]] 2, characterized in that the ceramic phase is constituted from at least one selected from the group made up of nitrides, carbides, composite nitrides, composite carbides, and carbonitrides of Al, Si, Zr, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 26 (currently amended):** A ceramic composite as set forth in claim [[1]] 2, characterized in that the ceramic phase is constituted from at least one selected from the group made up of nitrides, carbides, composite nitrides, composite carbides, and carbonitrides of Al, Si, Ti, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 27 (canceled)**

**Claim 28 (currently amended):** A ceramic composite as set forth in claim [[18]] 2, characterized in that the ceramic phase is constituted from at least one selected from the group made up of nitrides, carbides, composite nitrides, composite carbides, and carbonitrides of Si, Hf, V, Nb, Ta, Cr, Mo and W.

**Claim 29 (previously presented):** A ceramic composite as set forth in claim 28, characterized in that the open porosity in the composite superficially after being polished is 1% or less.

**Claim 30 (currently amended):** A ceramic composite as set forth in claim [[1]] 28, characterized in that the Vickers hardness of the composite in sintered form is 10 GPa or greater.

**Claims 31 and 32 (canceled)**

**Claim 33 (currently amended):** A ceramic-composite manufacturing method of manufacturing ~~a ceramic composite~~ as set forth in claim ~~[[1]]~~ 10, ~~composed of a phase having as its principal component a pure carbon allotrope of 3  $\mu$ m or less average crystal grain size, and a ceramic phase that excludes pure carbon allotropes, characterized in that a powder blend of a ceramic powder that excludes pure carbon allotropes and in which the average crystal grain size is 3  $\mu$ m or less is molded together with a carbon powder, and the obtained molded form is sintered within a non-oxidizing atmosphere at a sintering temperature of 800 to 1500°C and a~~ the sintering pressure ~~[[of]]~~ is 1000 MPa or more.

**Claim 34 (currently amended):** A method of manufacturing ~~[[a]]~~ the ceramic composite as set forth in claim 28, ~~composed of a phase having as its principal component a pure carbon allotrope of 3  $\mu$ m or less average crystal grain size, and a ceramic phase that excludes pure carbon allotropes, characterized in that a powder blend of a ceramic powder that excludes pure carbon allotropes and in which the average crystal grain size is~~ ~~[[3  $\mu$ m]]~~ or less constituting said ceramic phase is molded together with a carbon powder, and the obtained molded form is sintered within a non-oxidizing atmosphere at a sintering temperature of 800 to 1500°C and a sintering pressure of 1000 MPa or more.

**Claims 35 and 36 (canceled)**

**Claim 37 (currently amended):** A ceramic composite as set forth in claim ~~[[1]]~~ 2, characterized in that the ceramic phase consists of silicon carbide.

**Claim 38 (previously presented):** A ceramic composite as set forth in claim 37, characterized in that the pure carbon allotrope consists of graphite.

**Claim 39 (canceled)**

**Claim 40 (currently amended):** A ceramic composite as set forth in claim [[1]]  
2, characterized in that the ceramic phase consists of silicon nitride.

**Claim 41 (previously presented):** A ceramic composite as set forth in claim  
40, characterized in that the pure carbon allotrope consists of graphite.

**Claim 42 (currently amended):** A ceramic composite as set forth in claim [[1]]  
2, characterized in that the ceramic phase consists of tantalum carbide.